

# Expanding Crisis in the Prairie Pothole Region

hen farm programs, known as "swampbuster" and "sodsaver," began protecting wetlands and adjacent grassland ecosystems 25 years ago, the vast majority of wetlands in the U.S. already had been destroyed. Tall grass prairies and their wetland systems largely had ceased to exist. Yet, the threats to short grass prairie grassland in the prairie pothole region seemed less severe when swampbuster and sodsaver first were created.

By the mid-1980s wetland losses mostly had made way for new crop production, first in the prairie regions and then in the Mississippi Delta and other parts of the South. Creation of the Swampbuster Program in the 1985 Farm Bill was a huge success for wildlife, virtually halting loss of wetlands in farm country. Swampbuster served as a powerful mechanism for wetlands conservation because, under the program, farmers who drain wetlands risked losing various farm program benefits on their **whole** farm. Sodsaver, created to protect grasslands, came later and was much weaker. Under Sodsaver farmers who plow up native sod lose certain program benefits only on the part of the farm that is converted, not on the whole farm.

### **Grassland Crisis 1989-2003**

The current grassland crisis emerged very quickly. During 1989-2003, the most rapid conversion of grassland to crop uses occurred in critical prairie pothole landscapes, where loss rates sampled suggested 0.4% loss of grassland per year. Losses were greatest in the most productive areas for wildlife.

# **Accelerating Losses 2008-2011**

More recent estimates for roughly the same, key pothole region found that the annual rate of loss had doubled (to 0.95%) by 2006-2011. Crop price levels in 2011 likely would lead to a further, 60% increase in the rate of loss (to 1.5%), wiping out most of the remaining grassland in just over 30 years. Recent data howing actual 10% to 15% land conversions in Eastern North Dakota counties from 2008-2011 are even more pessimistic. If these most recent, actual loss rates continue, most of the remaining grasslands in this key nesting portion of the prairie pothole region will vanish within the next 15 years.

Nationally, we've already lost over 23 million acres of grassland, shrubland and wetland between 2008 and 2011 due to cropland conversion. More than 8.4 million acres were converted to corn, 5.6 million to soybeans and 5.2 million to winter wheat. Some states lost 1 million acres in these three years alone.

### Weaker Protections, Greater Need

The need for Swampbuster and Sodsaver Programs has greatly increased over the past 15 years due to factors



Wetlands like these in the Prairie Pothole Region of South Dakota are at risk. Photo by Don Poggensee. Courtesy Natural Resources Conservation Service.

encouraging accelerated land conversion to cropland. The immediate driver to expand cropland area was a tripling of crop land prices in places like South Dakota. These higher land prices result in large part from the tripling of government subsidies, mostly crop insurance subsidies, over roughly the same 15 year period, and from shifting 40% of the U.S. corn crop to biofuel uses. Crop prices also got an upward push from income growth in places like China, as people consume more meat. The world's grain reserves have been very low in most of the past several years. This year, the rapidly emerging grassland crisis in the heart of the prairie pothole region is exacerbated by the worst drought in decades. Crop prices and pressures on the land are expected to increase further in coming years.

## Changes in the 2013 Farm Bill

Wetland protections worked quietly and efficiently for so many years that people today easily forget why this program from another era is critically important. Although last year's Senate Farm Bill (S.3204) modifies Swamp-buster coverage to keep up with its new reliance on crop insurance subsidies, the House Bill (H.R. 6083) virtually eliminates Swampbuster's influence over farmers. Both the above bills retain but weaken the historically less effective Sodsaver program. Under these bills subsidies on converted land are reduced by only 50% and only for four years.

Although loss of either the prairie pothole wetlands or the prairie pothole grasslands would be a catastrophe for wildlife, U.S. food production virtually would be unchanged. Only a very small portion of U.S. farmers live in the affected regions, and relatively few of them plow up grasslands. Wildlife has everything to lose from the current crisis, which may be fixed quite easily by making strong Swampbuster and grassland protection part of crop insurance.

<sup>&</sup>lt;sup>i</sup> Stevens, S.E., J.A. Walker, D.R. Blunck, A. Jayaraman, D.E. Naugle, J.K. Ringleman, and A.J. Smith. 2008. Predicting Risk of Habitat Conversion in Native Temperate Grasslands. *Conservation Biology* 22:1320-1330.

ii Rashford, B. J. Walker, C. Bastian. 2011. Economics of Grassland Conversion to Cropland in the Prairie Pothole Region. *Conservation Biology* 25:272-284.

iii Faber, S., S. Rundquist, B. Lorenzen. 2012. Environmental Working Group. Unlimited Subsidies, High Prices Threaten "Prairie Potholes."

 $<sup>\</sup>frac{\text{http://www.ewg.org/agmag/2012/04/subsidized-sodbusting-unlimited-subsidies-high-prices-threaten-\%e2\%80\%9cprairie-potholes\%e2\%80\%9d/}{}$ 

<sup>&</sup>lt;sup>iv</sup> Faber, S., Rundquist, S., Male, T. 2012. Plowed Under: How Crop Subsidies Contribute to Massive Habitat Losses. Environmental Working Group. Accessed at <a href="http://static.ewg.org/pdf/plowed\_under.pdf">http://static.ewg.org/pdf/plowed\_under.pdf</a> on August 6, 2012.

<sup>&</sup>lt;sup>v</sup> Janssen, L., B. Pflueger, and T. Ahrendt. 2007. Agricultural Land Market Trends: 1991-2007. Agricultural Experiment Station, South Dakota State University, Brookings, SD: Available from <a href="http://ageconsearch.umn.edu/bitstream/9281/1/ci070272.pdf">http://ageconsearch.umn.edu/bitstream/9281/1/ci070272.pdf</a>

vi Headey, D., Malaiyandi, S., and Fan, S. 2009. Navigating the perfect storm: Reflections on the food, energy, and financial crises. International Food Policy Research Institute. IFPRI Discussion Paper 00889, Washington, D.C.